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United States Patent [19]

Engelson

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[54] **ANEURYSM CLOSURE METHOD**[75] **Inventor:** Erik T. Engelson, Menlo Park, Calif.[73] **Assignee:** Target Therapeutics, Inc., Fremont, Calif.[21] **Appl. No.:** 588,195[22] **Filed:** Jan. 18, 1996[51] **Int. Cl.⁶** A61B 17/00[52] **U.S. Cl.** 606/213; 606/191; 606/194;
604/53; 128/898[58] **Field of Search** 606/213, 214,
606/151, 108, 191, 194, 198, 200; 604/104,
49, 52, 53; 623/1, 11, 12; 128/898[56] **References Cited****U.S. PATENT DOCUMENTS**

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[57] **ABSTRACT**

This is a procedure for stabilizing or filling an aneurysm in the vasculature. The procedure involves the introduction into the aneurysm of a solid vaso-occlusive device such as a coil or braid and a polymeric composition which may be reformed or solidified in situ. The solid vaso-occlusive device is at least partially surrounded or enveloped by that polymeric composition. The polymeric composition is reformed via light, heat, R.F. or the like to form a rigid mass with the solid vaso-occlusive device. These steps may be carried out sequentially or the steps of introducing the vaso-occlusive device and reforming the polymeric composition may be carried out simultaneously. The procedure may be accomplished using intravascular catheters to access the desired site and to deliver the noted materials.

23 Claims, 9 Drawing Sheets